East Lockington Road Bridge
Spanning the Great Miami River
on East Lockington Road,
1.03 miles east of Lockington
Lockington Vicinity
Shelby County
Ohio

HAER No. OH-76

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
MID-ATLANTIC REGION, NATIONAL PARK SERVICE
DEPARTMENT OF THE INTERIOR
PHILADELPHIA, PENNSYLVANIA 19106

HISTORIC AMERICAN ENGINEERING RECORD

East Lockington Road Bridge HAER No. OH-76

Location: East Lockington Road spanning the Great Miami River 1.03 miles east of Lockington, Shelby County, Ohio.

USGS Piqua East, Ohio Quadrangle
Universe Transverse Mercator
Zone 16, 737060.4454549

Date of Construction: 1898

Present Owner: Shelby County, Ohio
Shelby County Engineer's Office
500 East Gearhart Road
Sidney, Ohio 45365

Present Use: Bridge has been declared unsafe and is closed to all traffic.

Significance: This bridge has been determined eligible for listing in the National Register of Historic Places because it is a good representative example of the Pratt pony truss design.

Project Information: This documentation was undertaken in October, 1990 in accordance with the Memorandum of Agreement by the Shelby County Engineer, Federal Highway Administration and the Ohio Historic Preservation Office as a mitigation measure prior to the removal of the bridge.

Fred Mitchell
Historic Preservation Associates
P. O. Box 8933
Cincinnati, Ohio 45208

The location of the East Lockington Road Metal Pony Truss Bridge has historically been used as a river crossing over the Great Miami River. Since the early settlement period, this crossing and another one located approximately one mile to the north have functioned to facilitate travel.

Prior to any structure being built, the river was forded either on foot or animal when low water levels would allow. This crossing was known as Hooven's Ford and received its name for its location next to a grain mill located on the east side of the river in Orange Township.

The first recorded bridge was a structure constructed in 1851. This was a two span wooden truss covered bridge. By this time, the area surrounding the bridge was mainly agricultural in character with isolated farmsteads.

The village of Lockington, located approximately one mile to the west of the river crossing, had emerged as the primary market center. Platted in 1837 as Lockport, its reason for being was related to the establishment of the Miami and Erie Canal. This canal, started in 1827 and finished in 1845, was a major transportation link on the west side of Ohio during the period of early agricultural settlement. Linking the cities of Cincinnati and Toledo, this canal afforded the opportunity to transport produce to larger markets. The village of Lockington was joined with the canal in 1841 because of its advantageous location on several small streams that were incorporated into the engineering of the canal as feeder streams helping to provide a steady source of water to keep the canal operating.

During the period from 1837 to 1868, the river crossing emerged as a vital link for the agricultural activities on the east side of the Great Miami River and the market and canal facilities of Lockington. Although, another river crossing was to be found to the north of this location, this crossing provided the shortest route to Lockington. In 1868, the Dayton and Michigan Railroad was constructed approximately one mile to the east of the river crossing. As a consequence of this railroad and others on the west side of the state, the canal declined in importance. During this time, railroads were the focus of transportation technology that moved people and goods. With the construction of this railroad, the village of Lockington declined in importance, but not the river crossing. Carriages and wagon traffic were moving east across the river to use the railroad station at nearby Kirkwood and for general local activities. Lockington, however, did remain as the major local market center.

Throughout the subsequent years, the river crossing facili-

tated local traffic movement and did not rise in importance beyond the local level of significance.

Major changes occured, at the river crossing, in 1898 as the result of spring flooding. Stream erosion caused by high water had cut a new channel to the east of the covered bridge isolating it from the river bank. This effectively cut off the bridge from its approach road. Newspaper accounts of the day reported that "The ordinarily placid Miami River was a different stream this week. Swollen by continuous rains, it rose beyond the confines of its banks Tuesday, and the heavy downpour all that evening increased its torrents beyond all records". (Sidney Journal, March 25, 1898)

By June of that year, the County Commissioners had awarded contracts to construct a new bridge to span the channel and allow for traffic to cross the river via the new bridge and the existing covered bridge. The Bellefontaine Bridge and Iron Company, located in nearby Bellefontaine, Ohio, was awarded a contract in the amount of $1,360.72 for the erection of spans 2, 3 and 4. This bridge company was important to bridge construction because their business extended beyond Ohio and the midwest into states as far away as Oklahoma and Nevada. Originally established as the Buchanan Bridge Company, they changed their name in 1895 and undertook to expand their business.

For reasons not documented, the Commissioners awarded a separate contract to the Brackett Bridge Company of Cincinnati, Ohio for the construction of the first span. One possible reason for the additional span could be that, before bank stabilization and construction took place, additional erosion occurred necessitating an additional span in order to cross the river. This span was constructed at a cost of $388.20. The Brackett Bridge Company was an outgrowth of an earlier company known as the Lomas Blacksmith Shop. This became known as William Lomas and Company. Under the direction of Mr. Lomas, the company made the transition from general blacksmith metal working to a small bridge and fabricated steel company. In 1898, the company was sold to Mr. F. J. P. Brackett. This span was one of the early contracts undertaken by the company. Throughout its history, the Brackett Bridge Company operated as a small bridge fabricator in Ohio, Indiana and Kentucky. It ceased operation in 1930.

The bridge consists of four iron spans incorporating the Pratt pony truss design. The overall length is 204'-9" and the width, out to out of trusses, is 17'-0" with a roadbed clearance width of 14'-8". The height is 5'-6" extending from top of deck to top chord. Incorporated within the first span, constructed by the Brackett Bridge Company, are four panels that measure 13'-9" in length at each end panel and 13'-9 1/2" at the two interior

panels. The overall length is 55'-1". The second span exhibits end panels of 11'-7 1/2" and two interior panels 11'-7 3/4" in length. Overall length is 46'-6 1/2". The third and fourth spans are indentical in design with both incorporating two end panels 12'-3" in length and two interior panels 12'-3 1/4" long. Overall length of each of these two spans is 49'-1/2".

The design of each end span incorporates riveted beams at the top chord and incline end posts, lattice verticals, and eye bar diagonals. The 2"x4" wooden deck is supported by eight small stringers beams resting atop three larger floor beams. The wooden deck is covered over with approximately 1" of asphalt. The verticals and diagonals are pinned in place above the floor beams with the floor beams anchored to the verticals and held together by "U" bolts. The lower chords, which tie the end portals together, are made up of eye bars pinned at each vertical. Above the deck and on each side of the bridge is found a horizontal lattice which acts as a barrier. Although company name plates were originally placed on each span, they have been removed by vandals.

Each span is anchored directly to either a pier or abutment. The three piers supporting the connection of the spans are made up of ashlar stone. At an unknown date, part of the piers have been covered over with concrete. The end abutments are also ashlar stone faced with concrete. Wing walls extend off each abutment.

The metal truss spans have experienced deterioration over the years. Load limits have been established in an effort to reduce the strain on various metal members. Metal deterioration especially at "U" bolt and eye bar pins has also caused concern. In 1985, an inspection identified extensive corrosion to metal elements and, as a result, the bridge was closed to all traffic. At that time, approximately 230 vehicles crossed over the river at this location each day.

Since there is a limited number of bridges that cross over the Great Miami River in Shelby County, the closing of this river crossing has greatly impacted travel by the public, commercial travel, emergency vehicles and bus transport of school children. A new replacement bridge has been planned that shall allow the crossing of the river by vehicular traffic. As part of the planning, it was proposed to remove only the metal truss bridge and retain, for preservation purposes, the wooden covered bridge adjacent to the new bridge. Since the Lockington Covered Bridge was listed in the National Register of Historic Places, because of its design, it was determined that it should serve as a reminder of an older bridge design. On October 18, 1989, the covered bridge was destroyed by a fire started by vandals.

SOURCES OF INFORMATION

American Atlas Company, Atlas and Directory of Shelby County, Ohio, 1900, Philadelphia, Pennsylvania.

Amos Press, A History of the Communities of Shelby County, Sidney Ohio, 1976.

Columbus Engineering Consultants, Ltd., Shelby County Road 132 Bridge Over The Miami River Preliminary Report, Columbus, Ohio 1985.

Columbus Engineering Consultants, Ltd., Shelby C. R. 132 Bridge Over the Maimi River Preliminary Case Report Historical Study, Columbus, Ohio, 1987.

Kennedy, R. P., History of Logan County, Ohio, S. J. Clark Publishing Company, Chicago, Illinois, 1903.

Ohio Department of Transportation, The Ohio Historic Bridge Inventory, Evaluation and Preservation Plan, Columbus, Ohio, 1983.

Ohio Department of Transportation, East Lockington Pratt Pony Truss Bridge Structure File No. 7530722, Columbus, Ohio.

Ohio Historic Preservation Office, Bridge Survey and Inventory Form for Lockington Bridge, Columbus, Ohio, 1981.

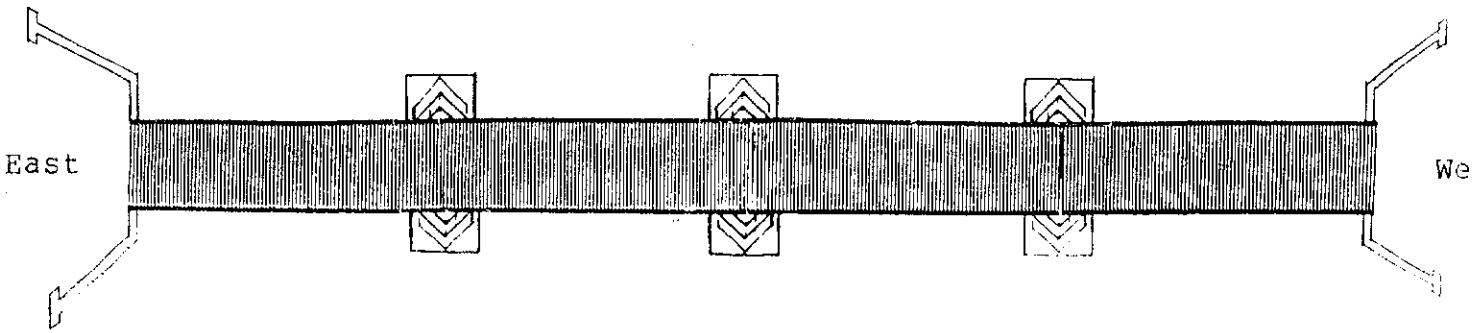
Page and Smith, Combined Atlas Map of Shelby County, Ohio, Philadelphia, Pennsylvania, 1875.

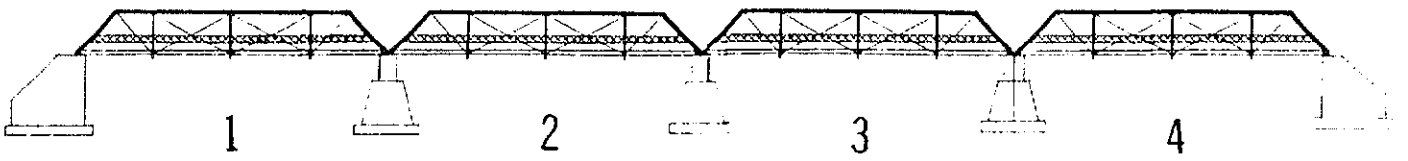
Riordan, Robert, An Archaeological Survey of the East Lockington Road Realignment and Bridge Replacement, Shelby County, Ohio, Submitted to Shelby County Engineer's Office, 1986.

Shelby County Engineer's Office, SHE-CR 132-1.01-1.03 Environmental Assessment/Final Section 4(f) 106 Evaluation, Sidney, Ohio, No Date.

Sherman, Paul, Notes of Shelby County History, Amos Memorial Public Library, Sidney, Ohio, No Date.

Sidney Journal, Sidney, Ohio.
Issues for: March 25, 1898
June 24, 1898
November 25, 1898





North Elevation

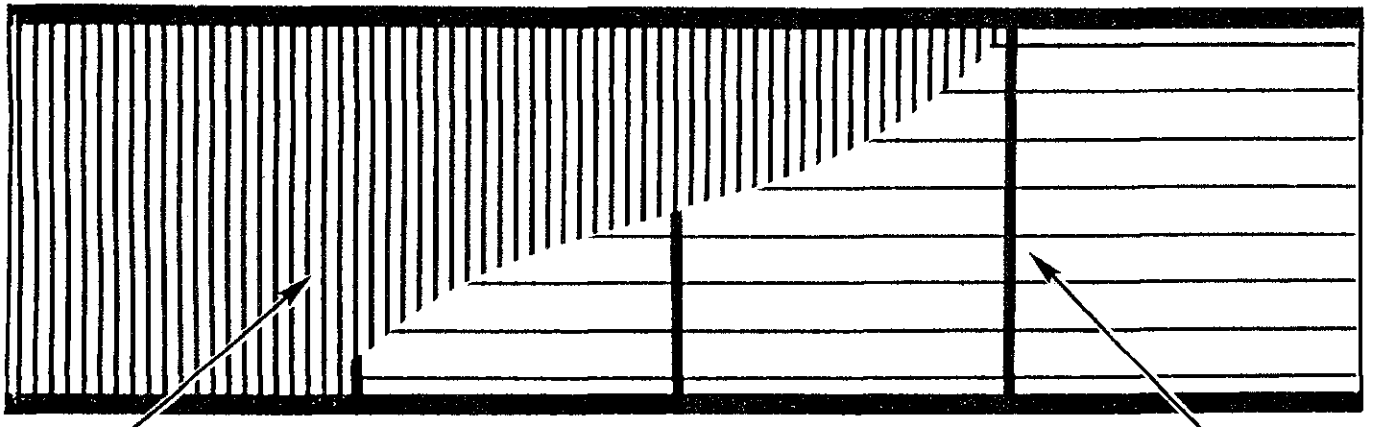
North

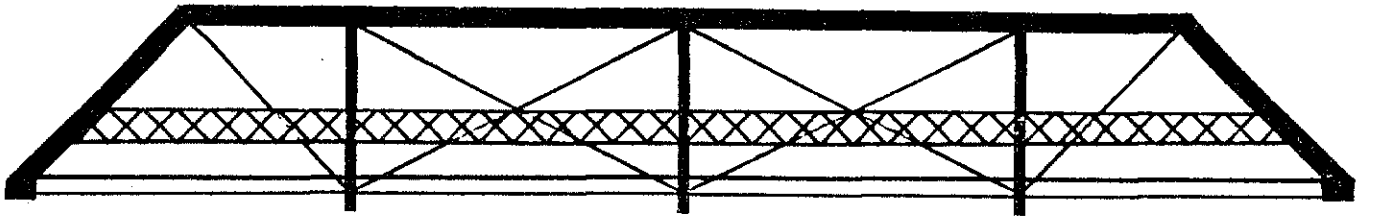
BRIDGE SPAN NUMBER LOCATION

Not to Scale

EAST LOCKINGTON ROAD BRIDGE
HAER No. OH-76 (Page 6)

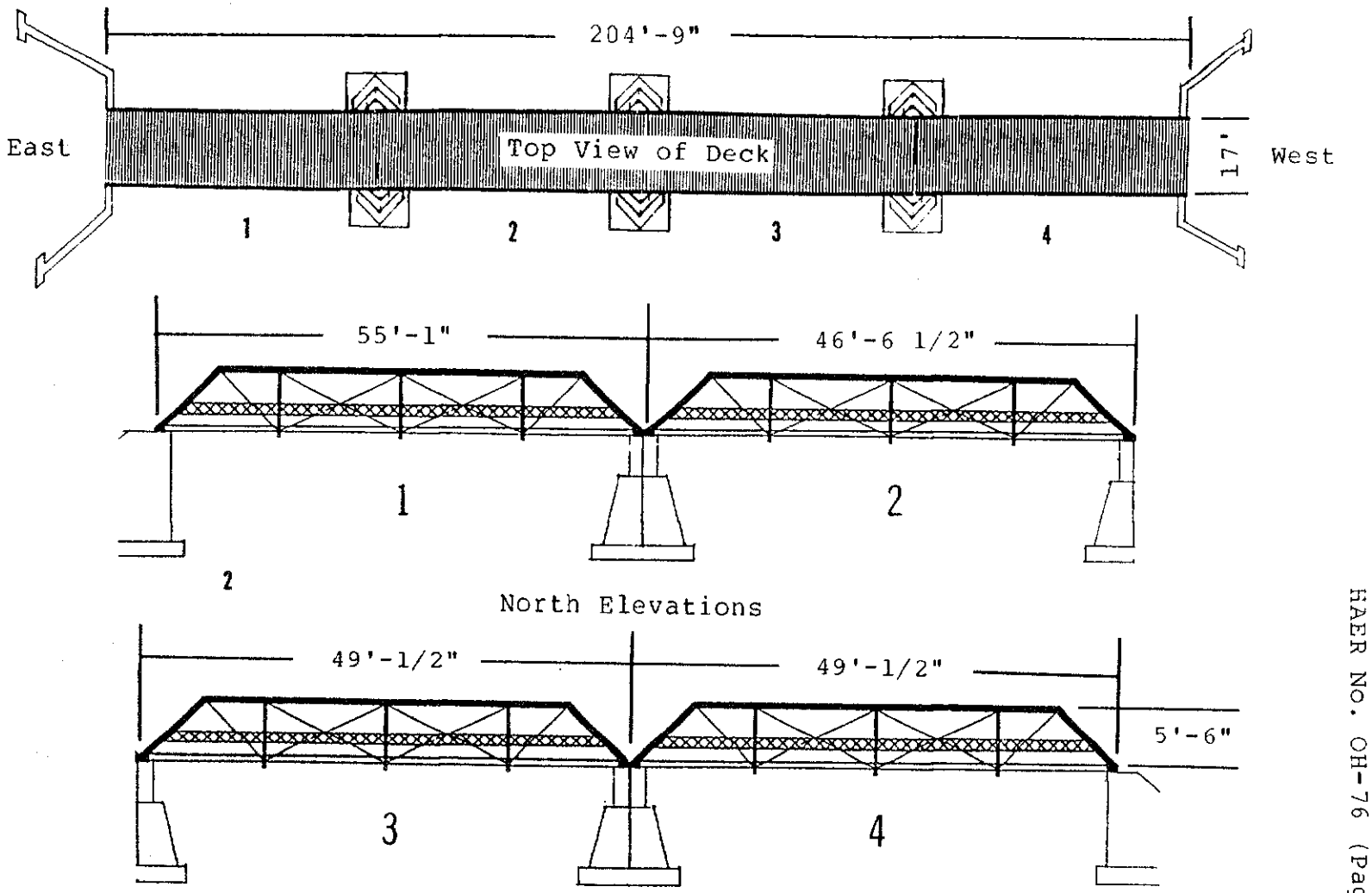
View of Deck





Side View

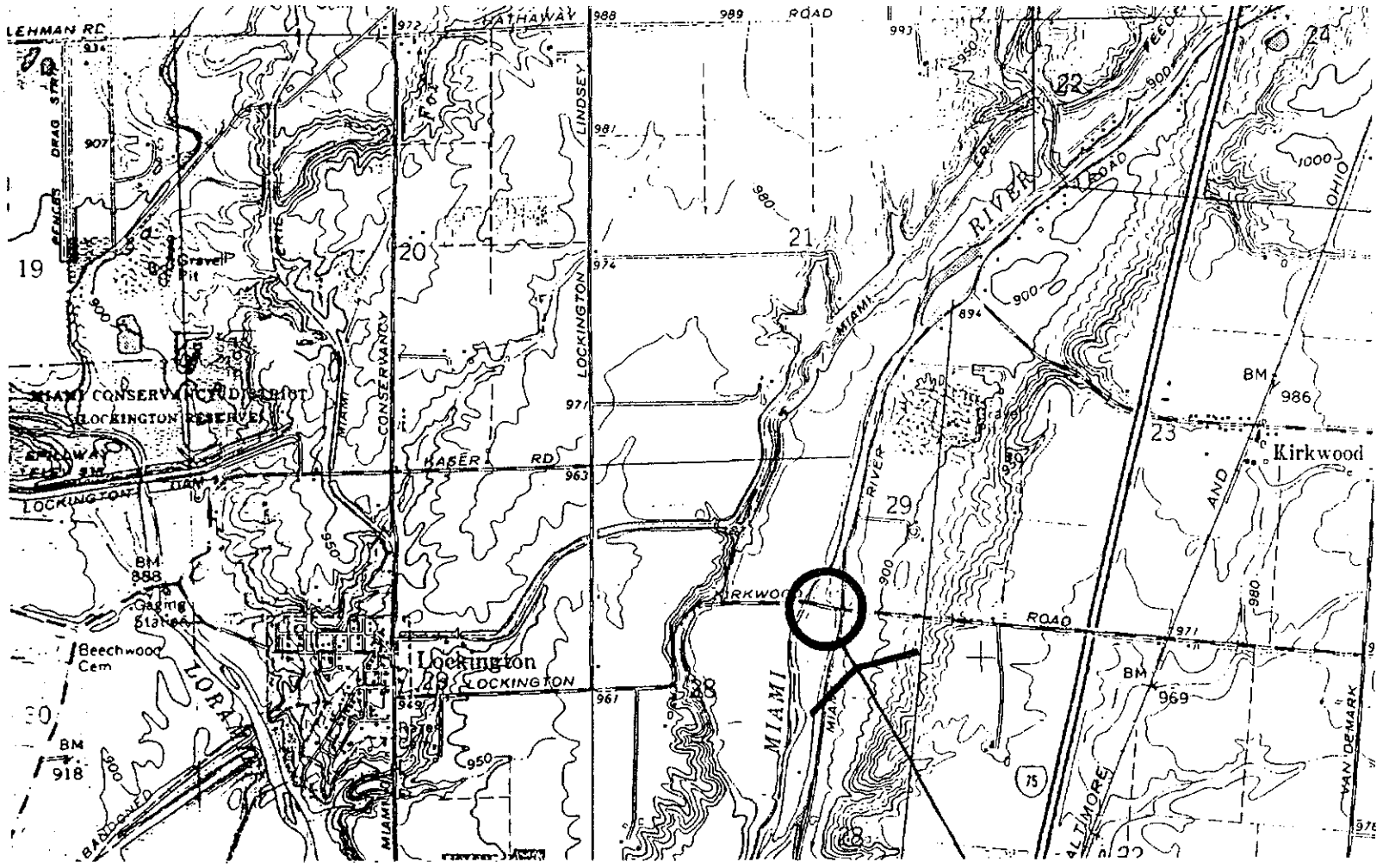
TYPICAL DESIGN CHARACTERISTICS



OVERALL DIMENSIONS of EACH SPAN

Not to Scale

EAST LOCKINGTON ROAD BRIDGE
HAER No. OH-76 (Page 8)



GENERAL LOCATION MAP

EAST LOCKINGTON ROAD BRIDGE
HAER No. OH-76 (Page 9)

EAST LOCKINGTON ROAD BRIDGE
HAER No. OH-76 (Page 10)

Not to Scale

SITE MAP

North